

Notice of Allowability

Application No.

10/732,776

Examiner

Mike Rahmjoo

Applicant(s)

KITA, KAZUNORI

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/09/03.
2. ☒ The allowed claim(s) is/are 12-20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date See Continuation Sheet
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Holtz on 04/02/2007.

The application has been amended as follows:

Please cancel claims 1- 11, delete the current abstract and replace it with the new abstract as it appears below:

A card type device is mounted on a card slot of an electronic appliance. A transparent cylindrical-shaped roller is provided at an edge portion of a housing such that an outer peripheral plane of the roller is projected from the edge portion. A one-dimensional image sensor is provided inside the roller, which acquires one-dimensional fingerprint data of a finger of a user, and this finger abuts against the outer peripheral plane of the roller. Since the finger abutting against the outer peripheral plane of the roller is moved, the roller is rotated, so that one-dimensional fingerprint data which are continuously acquired by the one-dimensional image sensor are synthesized with each other to produce fingerprint data as a two-dimensional image. The synthesized fingerprint data is transmitted to the electronic appliance which carries out fingerprint identification.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-11 , drawn to fingerprint data, classified in class 382, subclass 124.
- II. Claims 12- 20 , drawn to guiding mechanism for positioning a finger, classified in class 382, subclass 126.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination does not require a SELFOC lens array provided in said internal hollow portion of said roller, for focusing a one-dimensional image of the finger which abuts against the outer peripheral plane of said roller onto said one-dimensional image sensor. The subcombination has separate utility such as a SELFOC lens array used for focusing.

The examiner has required restriction between combination and subcombination inventions. Where applicant elects a subcombination, and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all

Art Unit: 2624

the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. Holtz on 04/02/2007 a provisional election was made without traverse to prosecute the invention of II, claims 12- 20. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1- 11 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Allowable Subject Matter

Claims 12- 20 are allowed.

The following is an examiner's statement of reasons for allowance:

None of the prior art, either singularly or in combination, fairly teaches or suggests applicant's claimed invention wherein applicant recites" a SELFOC lens array

provided in said internal hollow portion of said roller, for focusing a one-dimensional image of the finger which abuts against the outer peripheral plane of said roller onto said one-dimensional image sensor; and a holder for holding thereon said light source, said one-dimensional image sensor, and said SELFOC lens array, which is fixed to said card type housing in such a manner that even when said roller is rotated, said holder is not rotated."

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 6324310 teaches a method and apparatus for scanning a fingerprint using a linear optical sensor. A finger or palm is rolled over a transparent roller. A light source directs light through the roller to illuminate or detect the finger. Light directed through the roller is focused onto a linear imaging device. A full 2D recreation of the fingerprint is assembled from the discrete line-image data collected by the linear array imaging sensor. The apparatus contains a rotation detector to detect rotational

Art Unit: 2624

movement of the roller. A finger guide positioned adjacent to the roller prevents distortion of the finger due to excess pressure.

US PAP 2003/ 0035568 teaches a user interface including an at least partially transparent roller. The transparency allows the roller to be used as part of a fingerprint scanning system during fingerprint scans. The roller may also be used for other purposes during non-scanning periods. For example, the roller may be used in place of a conventional scroll key to control scrolling.

Inquiry

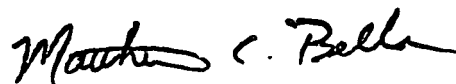
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Rahmjoo whose telephone number is 571-272-7789. The examiner can normally be reached on 8 AM- 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Bella can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mike Rahmjoo

April 2, 2007



MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Continuation of Attachment(s) 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date:
10/27/06,5/16/06,12/28/05,12/12/05,11/28/05,07/07/05,04/05/05.

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